

REMARKS

The Office Action of December 13, 2005 has been received and its contents carefully considered.

The present Amendment makes a minor revision in independent claims 1 and 21.

In reply to the rejection for obviousness-type double patenting, a terminal disclaimer is attached to this Amendment. The \$130 disclaimer fee is being submitted concurrently.

The Office Action rejects claims 1 and 2 under 35 U.S.C 102(b) as being anticipated by Nakagawa et al (US 5,805,417). For the sake of convenience, this reference will hereafter be called simply "Nakagawa." As will be discussed below, it is respectfully submitted that claims 1 and 2 are patentable over the reference.

Claim 1 recites an electronic device comprising a liquid crystal display, a motherboard, a converter board, and a fixing member. The motherboard comprises a heat dissipation module. The converter board converts a first signal from the motherboard to second signal suitable for use by the liquid crystal display. The fixing member connects the converter board and the heat dissipation module so that the converter board is fixed on the heat dissipation module. Claim 1 also recites a cushion member between the converter board and the heat dissipation module.

Nakagawa discloses a heat dissipation structure in a portable computer; that is, the purpose of Nakagawa's invention is not to dispose the converter board on the motherboard stably. Besides, in the Nakagawa reference, bolts or rods 69 clamp metal plates 65 and 68 together (column 3, lines 53-56). Nakagawa does not disclose that bolts or rods 69 connect a daughter board 20 and a heat dissipation block 52. In particular, the daughter board 20 is not fixed on the heat dissipation block 52. That is, Nakagawa does not disclose that a fixing member connects a converter board and a heat dissipation module so that the converter board is fixed on the heat dissipation module in accordance with claim 1. For these reason, claim 1 defines over the cited art.

Since Nakagawa does not disclose all the limitations of claim 1, claim 2 patently defines over the cited art at least the same reasons.

Claims 1-20 stand rejected under 35 U.S.C 103(a) as being unpatentable over US patent 6,570,561 to Boesch et al (hereafter simply "Boesch") in view of Nakagawa. This rejection is respectfully traversed.

Boesch discloses a portable computer with a low voltage differential signaling adapter. As described in column 4, lines 11-15, a TTL-to-LVDS converter 34 is coupled to a circuit board carrier 36 directly above the location of a graphics controller 32 in order to minimize the length of a flex cable 48 between the order display connector 50, which is coupled to the graphics controller 32, and the TTL-to-LVDS 34. In the preferred embodiment of the Boesch, the TTL-to-LVDS converter 34 is grounded to the carrier 36, along with the system board 24.

Regarding claim 1, Nakagawa fails to disclose "a fixing member connecting the converter board and the heat dissipation module ...," which is an element of claim 1. Nakagawa instead discloses that bolts or rods 69 clamp metal plates 65 and 68 together. Additionally, there is no motivation to combine Nakagawa and Boesch. Boesch discloses that a TTL-to-LVDS converter 34 is coupled to a circuit board carrier 36 directly above the location of the graphics controller 32 and that the TTL-to-LVDS converter 34 is grounded to the circuit board carrier 36. Each reference performs a substantially different collapsing technique. Where is the motivation to combine these references? How is the fixing member of Nakagawa to be used in Boesch's structure?

It is respectfully submitted that the rejection is based on a hindsight analysis of Applicant's claims, as opposed to being based on what the prior art teaches! The combination is just not understood, and the rejection should be withdrawn. Since claim 1 patently defines over the cited art, claims 2-20 are also patently defined over the cited art by virtue of their dependence from claim 1.


Claims 21-33 stand rejected under 35 U.S.C 103(a) as being unpatentable over Boesch in view of Nakagawa and Hsu. This rejection is also respectfully traversed.

Claim 21 recites a conversion module for a liquid crystal display and a motherboard that includes a heat dissipation module, comprising a converter board, a fixing member, a cushion member, and connectors. The fixing member connects the converter board and the heat dissipation module so that the converter board is fixed on the heat dissipation module.

Hsu discloses a motherboard with an expanded device 20 of a liquid crystal display. In Hsu, the expanded device 20 is connected with a motherboard 10 through a signal connecting device 14, a cable 16, a signal transferring cable 22, and a third signal connector 240. In particular, the expanded device 20 is not disposed on the motherboard 10 for saving space. Hsu teaches a connecting apparatus that the expanded device 20 can avoid being disposed on the motherboard 10. That is, there is no motivation to combine Hsu with Nakagawa, so the rejection should be withdrawn. Additionally, there would be no motivation to combine Nakagawa, as stated above. For at least these reasons, claim 21 patently defines over the cited art. Thus, claims 22-33 are also patently define over the cited art by virtue of their dependence from claim 21.

For the foregoing reasons, it is respectfully submitted that this application is in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,



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